

IN THE CLAIMS

1 (Currently Amended). A method comprising:

forming a phase change memory element to be read with a voltage greater than or equal to the threshold voltage of the element and to have a holding voltage that is at least 80 percent of the threshold voltage of the element.

Claim 2 (Canceled).

3 (Original). The method of claim 1 including forming a phase change memory element to have a threshold voltage that does not vary by more than 10 percent with programming currents varying as much as two times.

4 (Original). The method of claim 1 including forming a phase change memory element including a phase change material between a pair of electrodes.

5 (Original). The method of claim 4 including forming a phase change material with a lower electrode of titanium silicon nitride.

6 (Currently Amended). An apparatus comprising:

a phase change memory element to be read with a voltage greater than or equal to the threshold voltage of the element, said element having a holding voltage that is at least 80 percent of the threshold voltage of the element.

7 (Original). The apparatus of claim 6 wherein said element includes an upper and a lower electrode and a phase change material between said electrodes.

Claim 8 (Canceled).

9 (Original). The apparatus of claim 6 wherein the phase change memory element has a threshold voltage that varies by less than 10 percent with varying programming currents.

10 (Original). The apparatus of claim 7 wherein said lower electrode includes titanium silicon nitride or carbon.

11 (Currently Amended). A system comprising:
a processor;
a wireless interface coupled to said processor; and
a phase change memory element that is read with a voltage greater than or equal to the threshold voltage of the element, said element having a holding voltage that is at least 80 percent of the threshold voltage of the element.

12 (Previously Presented). The system of claim 11 wherein said wireless interface includes a dipole antenna.

13 (Original). The system of claim 11 wherein said element includes an upper and lower electrode and a phase change material between said electrodes.

14 (Original). The system of claim 13 wherein said lower electrode includes titanium silicon nitride.

Claim 15 (Canceled).

16 (Original). The system of claim 11 wherein the phase change memory element has a threshold voltage that does not vary by more than 10 percent with programming currents varying by as much as two times.

17 (Currently Amended). A method comprising:
reading a phase change memory, having a holding voltage that is at least 80 percent of its threshold voltage, with a voltage greater than or equal to the threshold voltage of the phase change memory.

18 (Original). The method of claim 17 including using a memory controller to cause the phase change memory to be read.

19 (Original). The method of claim 18 including using a memory controller that is a separate integrated circuit from an integrated circuit including said phase change memory.